

## **Claims**

What is claimed is:

1. A method of facilitating automatic participation in an electronic auction, said method comprising the steps of:

5 obtaining information relating to an auction;

choosing an order computation method;

computing an order via executing the chosen order computation method; and

placing the computed order.

10 2. The method according to Claim 1, wherein said steps of choosing, computing and placing are repeated at least one more time, whereby at least one revised order is computed and placed.

3. The method according to Claim 1, wherein said steps of choosing, computing and placing are performed periodically.

15 4. The method according to Claim 3, wherein periodic execution of said choosing, executing and placing steps is triggered by at least one of: a periodic wakeup signal,

receipt of an appropriate market activity message, and a sufficient change in parameters relating to a user.

5        5. The method according to Claim 1, wherein said step of obtaining information comprises obtaining information about the auction type and auction rules relating to an auction.

6. The method according to Claim 5, wherein said choosing step comprises choosing an order computation method appropriate to the auction type and auction rules.

10       7. The method according to Claim 5, wherein said step of obtaining information relating to the auction type and auction rules comprises obtaining information relating to the auction type and auction rules from an auctioneer via at least one message.

8. The method according to Claim 7, further comprising the step of initiating a prompt for performing said step of obtaining information from an auctioneer.

15       9. The method according to Claim 5, wherein said step of obtaining information relating to the auction type and auction rules comprises obtaining information about the existence or absence of an order queue.

10. The method according to Claim 1, wherein said step of obtaining information comprises:

obtaining information about parameters relating to a user; and

obtaining information about an ongoing auction.

11. The method according to Claim 10, wherein said computing step comprises  
executing the chosen order computation method while taking into account the parameters  
5 relating to a user and the information relating to the ongoing auction.

12. The method according to Claim 10, wherein said step of obtaining  
information relating to the parameters of a user comprises obtaining limit prices relating to  
the user.

13. The method according to Claim 10, wherein said step of obtaining  
10 information relating to the parameters of a user is performed prior to the beginning of an  
auction.

14. The method according to Claim 1, wherein said step of obtaining information  
comprises obtaining information from an auctioneer relating to market activity.

15. The method according to Claim 1, further comprising the step of receiving  
15 periodic prompts to consider the computation of an order.

16. The method according to Claim 1, further comprising the step of deciding on the viability of computing an order prior to said step of computing an order.

17. The method according to Claim 1, wherein said step of computing an order comprises the step of ascertaining the legality of the order.

5 18. The method according to Claim 1, wherein said step of computing an order comprises computing a belief function.

19. The method according to Claim 7, wherein said step of computing a belief function comprises estimating, for one or more candidate prices within a predetermined range, the likelihood for a bid or ask at each price to result in a trade.

10 20. The method according to Claim 1, wherein said choosing step comprises ascertaining the viability of computing an order via computing a belief function.

21. The method according to Claim 1, wherein said step of obtaining information comprises obtaining a history of market activity.

22. The method according to Claim 1, further comprising the step of aggregating  
15 the information relating to an ongoing auction into a market history.

23. The method according to Claim 22, further comprising the step of augmenting the market history with historical information from one or more previous auctions.

24. A method of facilitating automatic participation in an electronic auction, said method comprising the steps of:

5 obtaining information relating to an ongoing auction;

computing an order based on the obtained information; and

placing the computed order;

wherein said step of computing an order comprises estimating, for one or more candidate prices within a predetermined range, the likelihood for a bid or ask at each price  
10 to result in a trade.

25. A method of facilitating automatic participation of an external buyer in an electronic auction, said method comprising the steps of:

automatically obtaining information relating to an auction on behalf of an external buyer;

15 automatically computing an order on behalf of the buyer; and

automatically placing the computed order on behalf of the buyer.

26. The method according to Claim 25, further comprising the step of:

choosing an order computation method;

wherein said computing step comprises computing an order via executing the

5 chosen order computation method.

27. An apparatus for facilitating automatic participation in an electronic auction,  
said apparatus comprising:

an arrangement for obtaining information relating to an auction;

an arrangement for choosing an order computation method;

10 an arrangement for computing an order via executing the chosen order  
computation method; and

an arrangement for placing the computed order.

28. The apparatus according to Claim 27, further comprising an arrangement for  
triggering periodic execution of said choosing, executing and placing steps.

29. The apparatus according to Claim 28, wherein said triggering arrangement is adapted to trigger via at least one of: a periodic wakeup signal, receipt of an appropriate market activity message, and a sufficient change in parameters relating to a user.

30. The apparatus according to Claim 27, wherein obtaining arrangement is  
5 adapted to obtain information about the auction type and auction rules relating to an auction.

31. The apparatus according to Claim 30, wherein said choosing arrangement is adapted to choose an order computation method appropriate to the auction type and auction rules.

10 32. The apparatus according to Claim 30, wherein said obtaining arrangement is adapted to obtain information relating to the auction type and auction rules from an auctioneer via at least one message.

33. The apparatus according to Claim 32, further comprising an arrangement for initiating a prompt to obtain information from an auctioneer.

15 34. The apparatus according to Claim 30, wherein said obtaining arrangement is adapted to obtaining information about the existence or absence of an order queue.

35. The apparatus according to Claim 27, wherein obtaining arrangement is adapted to:

obtain information about parameters relating to a user; and

obtain information about an ongoing auction.

5 36. The apparatus according to Claim 35, wherein said computing arrangement is adapted to execute the chosen order computation method while taking into account the parameters relating to a user and the information relating to the ongoing auction.

37. The apparatus according to Claim 35, wherein said obtaining arrangement is adapted to obtain limit prices relating to the user.

10 38. The apparatus according to Claim 27, wherein said obtaining arrangement is adapted to obtain information from an auctioneer relating to market activity.

39. The apparatus according to Claim 27, further comprising an arrangement for deciding on the viability of computing an order prior to computing an order.

40. The apparatus according to Claim 27, wherein said computing arrangement is adapted to ascertain the legality of an order.

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41. The apparatus according to Claim 27, wherein said computing arrangement is adapted to compute a belief function.

42. The apparatus according to Claim 27, wherein said choosing arrangement is adapted to ascertain the viability of computing an order via computing a belief function.

5 43. The apparatus according to Claim 27, wherein said obtaining arrangement is adapted to obtain a history of market activity.

44. The apparatus according to Claim 27, further comprising an arrangement for aggregating the information relating to an ongoing auction into a market history.

45. The apparatus according to Claim 44, further comprising an arrangement for  
10 augmenting the market history with historical information from one or more previous auctions.

46. An apparatus for facilitating automatic participation in an electronic auction, said apparatus comprising:

an arrangement for obtaining information relating to an auction;

15 an arrangement for computing an order based on the obtained information; and

an arrangement for placing the computed order;

wherein said computing arrangement is adapted to estimate, for one or more candidate prices within a predetermined range, the likelihood for a bid or ask at each price to result in a trade.

5           47. A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for facilitating automatic participation in an electronic auction, said method comprising the steps of:

obtaining information relating to an auction;

choosing an order computation method;

10           computing an order via executing the chosen order computation method; and

placing the computed order.

48. A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for facilitating automatic participation in an electronic auction, said method comprising the steps of:

15           obtaining information relating to an ongoing auction;

computing an order based on the obtained information; and

placing the computed order;

wherein said step of computing an order comprises estimating, for one or more candidate prices within a predetermined range, the likelihood for a bid or ask at each price  
5 to result in a trade.

49. A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for facilitating automatic participation of an external buyer in an electronic auction, said method comprising the steps of:

10 automatically obtaining information relating to an auction on behalf of an external buyer;

automatically computing an order on behalf of the buyer; and

automatically placing the computed order on behalf of the buyer.